AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior versions:

1. (Cancelled)

2. (Cancelled)

3. (Currently Amended) A method comprising:~~The method of claim 2 wherein~~ ~~the at least one iteration of the reporting task comprises:~~

reporting a spanning tree to a distributed dictionary for a plurality of nodes comprising a network, said plurality of nodes to adopt the spanning tree from the distributed dictionary in a coordinated manner to avoid a transient topology loop in the network, wherein reporting the spanning tree comprises:

performing at least one iteration of a reporting task to disable links to be removed from among the plurality of nodes, wherein the at least one iteration of the reporting task comprises:

_____ identifying the links to be removed based on a comparison of the spanning tree to a previous spanning tree;

_____ removing the links to be removed from the previous spanning tree to generate a modified spanning tree; and

_____ registering the modified spanning tree to the distributed dictionary; and

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performing at least one additional iteration of the reporting task to enable links to be added among the plurality of nodes only after the links to be removed have been disabled.

2. (Original) The method of claim 3 wherein registering the modified spanning tree comprises:

identifying an incarnation identifier for the previous spanning tree;

advancing the incarnation identifier; and

combining the incarnation identifier with the modified spanning tree.

3. (Original) The method of claim 3 wherein registering the modified spanning tree comprises:

storing the modified spanning tree to local memory; and

multicasting the spanning tree to a remainder of the plurality of nodes.

4. (Currently Amended) The method of claim 2 A method comprising:

reporting a spanning tree to a distributed dictionary for a plurality of nodes comprising a network, said plurality of nodes to adopt the spanning tree from the distributed dictionary in a coordinated manner to avoid a transient topology loop in the network, wherein reporting the spanning tree comprises:

performing at least one iteration of a reporting task to disable links to be removed from among the plurality of nodes; and

_____ performing at least one additional iteration of the reporting task to enable links to be added among the plurality of nodes only after the links to be removed have been disabled, wherein the at least one additional iteration of the reporting task comprises:

_____ identifying the links to be added based on a comparison of the spanning tree to a previous spanning tree;

_____ verifying there are no remaining links to be removed;

_____ verifying that the plurality of nodes are synchronized with respect to adoption of the previous spanning tree;

_____ adding the links to be added to the previous spanning tree to generate a modified spanning tree; and

_____ registering the modified spanning tree to the distributed dictionary.

7. (Original) The method of claim 6 wherein verifying there are no remaining links comprises:

subtracting a set of links defined by the spanning tree from a set of links defined by the previous spanning tree to provide a result;

verifying that the result is a null set;

accessing a set of acknowledgements from the plurality of nodes registered in the distributed dictionary; and

verifying that an incarnation identifier for each acknowledgement in the set of acknowledgements is equal.

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8. (Currently Amended) A method comprising:

reporting a spanning tree to a distributed dictionary for a plurality of nodes

comprising a network, said plurality of nodes to adopt the spanning tree from the

distributed dictionary in a coordinated manner to avoid a transient topology loop

in the network, wherein reporting the spanning tree comprises:

performing at least one iteration of a reporting task to disable links

to be removed from among the plurality of nodes; and

performing at least one additional iteration of the reporting task to

enable links to be added among the plurality of nodes only after the links to be

removed have been disabled, The method of claim 2 wherein prior to performing

a next iteration of the reporting task, the method further comprises:

accessing acknowledgements from the plurality of nodes in the

distributed dictionary, said acknowledgements including incarnation identifiers for

a most current spanning tree adopted by respective ones of the plurality of

nodes;

identifying a lowest incarnation identifier stored in the distributed

dictionary;

comparing the lowest incarnation identifier to an incarnation

identifier of a most recently reported spanning tree; and

initiating the next iteration of the reporting task if the lowest

incarnation identifier is equal to the incarnation identifier of the most recently

reported spanning tree.

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9. (Cancelled)

10. (Currently Amended) A method comprising:

adopting a spanning tree from a distributed dictionary in a manner coordinated throughout a plurality of nodes comprising a network to avoid a transient topology loop in the network; The method of claim 9 wherein adopting the spanning tree comprises:

_____ identifying the spanning tree as a new spanning tree in the distributed dictionary;

_____ extracting ports from the new spanning tree corresponding to a particular node;

_____ disabling any ports at the particular node not extracted from the new spanning tree; and

_____ enabling any ports at the particular node after disabling any ports not extracted from the new spanning tree.

11. (Currently Amended) The method of claim 9 further claim 10 further comprising:

acknowledging an adoption of the spanning tree.

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12. (Original) The method of claim 11 wherein acknowledging adoption of the spanning tree comprises:

registering an incarnation identifier of a most currently adopted spanning tree to the distributed dictionary.

13. (Original) The method of claim 10 wherein identifying the spanning tree as the new spanning tree comprises:

receiving the spanning tree at the particular node, said spanning tree including an incarnation identifier;

retrieving an incarnation identifier for an entry in the distributed dictionary corresponding to the spanning tree;

comparing the incarnation identifier of the spanning tree to the incarnation identifier for the entry; and

identifying the spanning tree as a new spanning tree if the incarnation identifier for the entry is older than the incarnation identifier for the spanning tree.

14. (Cancelled)

15. (Cancelled)

16. (Cancelled)

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17. (Currently Amended) <u>An article comprising:</u>

<u>a machine readable storage medium having stored thereon executable instructions to implement reporting a spanning tree to a distributed dictionary for a plurality of nodes comprising a network, said plurality of nodes to adopt the spanning tree from the distributed dictionary in a coordinated manner to avoid a transient topology loop in the network, wherein the reporting the spanning tree comprises:</u>

<u>performing at least one iteration of a reporting task to disable links to be removed from among the plurality of nodes,</u> ~~The article of claim 16~~ wherein the at least one iteration of the reporting task comprises:

identifying the links to be removed based on a comparison of the spanning tree to a previous spanning tree;

removing the links to be removed from the previous spanning tree to generate a modified spanning tree; and

registering the modified spanning tree to the distributed dictionary<u>; and</u>

<u>performing at least one additional iteration of the reporting task to enable links to be added among the plurality of nodes only after the links to be removed have been disabled.</u>

18. (Original) The article of claim 17 wherein registering the modified spanning tree comprises:

identifying an incarnation identifier for the previous spanning tree;

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advancing the incarnation identifier; and

combining the incarnation identifier with the modified spanning tree.

13. (Original) The article of claim 11 wherein registering the modified spanning tree comprises:

storing the modified spanning tree to local memory; and

multicasting the spanning tree to a remainder of the plurality of nodes.

14. (Currently Amended) An article comprising:

a machine readable storage medium having stored thereon executable instructions to implement reporting a spanning tree to a distributed dictionary for a plurality of nodes comprising a network, said plurality of nodes to adopt the spanning tree from the distributed dictionary in a coordinated manner to avoid a transient topology loop in the network, wherein reporting the spanning tree comprises:

performing at least one iteration of a reporting task to disable links to be removed from among the plurality of nodes; and

performing at least one additional iteration of the reporting task to enable links to be added among the plurality of nodes only after the links to be removed have been disabled, The article of claim 16 wherein the at least one additional iteration of the reporting task comprises:

identifying the links to be added based on a comparison of the spanning tree to a previous spanning tree;

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verifying there are no remaining links to be removed;

verifying that the plurality of nodes are synchronized with

respect to adoption of the previous spanning tree;

adding the links to be added to the previous spanning tree to

generate a modified spanning tree; and

registering the modified spanning tree to the distributed

dictionary.

21. (Original) The article of claim 20 wherein verifying there are no remaining

links comprises:

subtracting a set of links defined by the spanning tree from a set of links

defined by the previous spanning tree to provide a result;

verifying that the result is a null set;

accessing a set of acknowledgements from the plurality of nodes

registered in the distributed dictionary; and

verifying that an incarnation identifier for each acknowledgement in the set

of acknowledgements is equal.

22. (Currently Amended) An article comprising:

a machine readable storage medium having stored thereon executable

instructions to implement reporting a spanning tree to a distributed dictionary for

a plurality of nodes comprising a network, said plurality of nodes to adopt the

spanning tree from the distributed dictionary in a coordinated manner to avoid a

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transient topology loop in the network, wherein reporting the spanning tree

comprises:

performing at least one iteration of a reporting task to disable links

to be removed from among the plurality of nodes; and

performing at least one additional iteration of the reporting task to

enable links to be added among the plurality of nodes only after the links to be

removed have been disabled, The article of claim 15 wherein prior to performing

a next iteration of the reporting task, the executable instructions further

implement:

accessing acknowledgements from the plurality of nodes in the

distributed dictionary, said acknowledgements including incarnation identifiers for

a most current spanning tree adopted by respective ones of the plurality of

nodes;

identifying a lowest incarnation identifier stored in the distributed

dictionary;

comparing the lowest incarnation identifier to an incarnation

identifier of a most recently reported spanning tree; and

initiating the next iteration of the reporting task if the lowest

incarnation identifier is equal to the incarnation identifier of the most recently

reported spanning tree.

23. (Cancelled)

24. (Currently Amended) <u>An article comprising:</u>

<u>a machine readable storage medium having stored thereon executable</u>

<u>instructions to implement adopting a spanning tree from a distributed dictionary</u>

<u>in a manner coordinated throughout a plurality of nodes comprising a network to</u>

<u>avoid a transient topology loop in the network,</u> ~~The article of claim 23~~ wherein

adopting the spanning tree comprises:

_____ identifying the spanning tree as a new spanning tree in the

distributed dictionary;

_____ extracting ports from the new spanning tree corresponding to a

particular node;

_____ disabling any ports at the particular node not extracted from the

new spanning tree; and

_____ enabling any ports at the particular node after disabling any ports

not extracted from the new spanning tree.

25. (Currently Amended) The article of ~~claim 23 wherein~~ claim 24 wherein the

executable instructions further implement:

acknowledging an adoption of the spanning tree.

26. (Original) The article of claim 25 wherein acknowledging adoption of the

spanning tree comprises:

registering an incarnation identifier of a most currently adopted spanning

tree to the distributed dictionary.

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27. (Original) The article of claim 24 wherein identifying the spanning tree as the new spanning tree comprises:

receiving the spanning tree at the particular node, said spanning tree including an incarnation identifier;

retrieving an incarnation identifier for an entry in the distributed dictionary corresponding to the spanning tree;

comparing the incarnation identifier of the spanning tree to the incarnation identifier for the entry; and

identifying the spanning tree as a new spanning tree if the incarnation identifier for the entry is older than the incarnation identifier for the spanning tree.

28. (Cancelled)